CIS 716.5 Homework 2

1. Recall the vacuum world from Lecture 4 "Deductive reasoning agents". Formulate the operations available to the agent using the STRIPS notation.

   (20 points)

2. (a) Explain what beliefs, desires and intentions are in the context of a practical reasoning agent.

   (20 points)

   (b) Explain how beliefs, desires and intentions interact in the control of a practical reasoning agent.

   (20 points)

3. (a) Explain what is meant by a "commitment strategy" for a practical reasoning agent. Give an example of a possible commitment strategy as part of your answer.

   (20 points)

   (b) Why is it hard to define an optimal commitment strategy? What factors need to be considered when defining a commitment strategy for a particular agent, and what aspect of the agent's environment are important in this definition?

   (20 points)